

Tamás Pajkossy

List of Publications by Year in descending order

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73

papers

4,749

citations

136950

32

h-index

91884

69

g-index

73

all docs

73

docs citations

73

times ranked

3082

citing authors

#	ARTICLE	IF	CITATIONS
1	Impedance of rough capacitive electrodes. <i>Journal of Electroanalytical Chemistry</i> , 1994, 364, 111-125.	3.8	523
2	Fractal dimension and fractional power frequency-dependent impedance of blocking electrodes. <i>Electrochimica Acta</i> , 1985, 30, 1533-1540.	5.2	444
3	On the origin of capacitance dispersion of rough electrodes. <i>Electrochimica Acta</i> , 2000, 46, 207-211.	5.2	260
4	Impedance spectroscopy at interfaces of metals and aqueous solutions – Surface roughness, CPE and related issues. <i>Solid State Ionics</i> , 2005, 176, 1997-2003.	2.7	238
5	Diffusion to fractal surfaces II. Verification of theory. <i>Electrochimica Acta</i> , 1989, 34, 171-179.	5.2	222
6	Double layer capacitance of Pt(111) single crystal electrodes. <i>Electrochimica Acta</i> , 2001, 46, 3063-3071.	5.2	208
7	Tafel current at fractal electrodes. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1990, 285, 103-115.	0.1	207
8	Electrochemistry at fractal surfaces. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1991, 300, 1-11.	0.1	188
9	Impedance aspects of anion adsorption on gold single crystal electrodes. <i>Journal of Electroanalytical Chemistry</i> , 1996, 414, 209-220.	3.8	182
10	Diffusion to fractal surfaces. <i>Electrochimica Acta</i> , 1986, 31, 1347-1350.	5.2	169
11	Impedance of rough capacitive electrodes: the role of surface disorder. <i>Journal of Electroanalytical Chemistry</i> , 1998, 448, 139-142.	3.8	149
12	The interface between Au(111) and an ionic liquid. <i>Electrochimica Acta</i> , 2010, 55, 6212-6217.	5.2	136
13	Measurement of adsorption rates of anions on Au(111) electrodes by impedance spectroscopy. <i>Electrochimica Acta</i> , 2002, 47, 2055-2063.	5.2	118
14	Electrochemical impedance spectroscopy in interfacial studies. <i>Current Opinion in Electrochemistry</i> , 2017, 1, 53-58.	4.8	107
15	Diffusion to fractal surfaces III. Linear sweep and cyclic voltammograms. <i>Electrochimica Acta</i> , 1989, 34, 181-186.	5.2	100
16	Electrochemical determination of the fractal dimension of fractured surfaces. <i>Acta Metallurgica Et Materialia</i> , 1992, 40, 1819-1826.	1.8	92
17	Capacitance dispersion on solid electrodes: anion adsorption studies on gold single crystal electrodes. <i>Solid State Ionics</i> , 1997, 94, 123-129.	2.7	87
18	Electrochemistry at fractal interfaces: the coupling of ac and dc behaviour at irregular electrodes. <i>Electrochimica Acta</i> , 1990, 35, 1567-1572.	5.2	74

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19	Scaling-law analysis to describe the impedance behavior of fractal electrodes. Physical Review B, 1990, 42, 709-719.	3.2	73
20	Impedance of Fractal Blocking Electrodes. Journal of the Electrochemical Society, 1986, 133, 2061-2064.	2.9	70
21	Anion-exchange behavior of polypyrrole membranes. The Journal of Physical Chemistry, 1988, 92, 3560-3565.	2.9	67
22	The interface between Au(100) and 1-butyl-3-methyl-imidazolium-hexafluorophosphate. Physical Chemistry Chemical Physics, 2011, 13, 11627.	2.8	67
23	Impedance aspects of anion adsorption on gold single crystal electrodes. Journal of Electroanalytical Chemistry, 1996, 414, 209-220.	3.8	63
24	The interfacial capacitance of Au(100) in an ionic liquid, 1-butyl-3-methyl-imidazolium hexafluorophosphate. Electrochemistry Communications, 2011, 13, 284-286.	4.7	60
25	On the origin of the double layer capacitance maximum of Pt(111) single crystal electrodes. Electrochemistry Communications, 2003, 5, 283-285.	4.7	56
26	Anion-adsorption-related frequency-dependent double layer capacitance of the platinum-group metals in the double layer region. Electrochimica Acta, 2008, 53, 7403-7409.	5.2	51
27	The interfaces of Au(111) and Au(100) in a hexaalkyl-substituted guanidinium ionic liquid: an electrochemical and in situ STM study. Physical Chemistry Chemical Physics, 2012, 14, 10647.	2.8	48
28	Double layer capacitance of the platinum group metals in the double layer region. Electrochemistry Communications, 2007, 9, 1171-1174.	4.7	45
29	Diffusion kinetics at fractal electrodes. Journal of Electroanalytical Chemistry, 1994, 366, 69-73.	3.8	41
30	Diffusion to fractal surfacesâ€”V. quasi-random interfaces. Electrochimica Acta, 1991, 36, 163-165.	5.2	40
31	Voltammetry and impedance measurements of Ir(111) electrodes in aqueous solutions. Journal of Electroanalytical Chemistry, 2005, 582, 69-75.	3.8	40
32	Voltammetry and impedance measurements of Ir(100) electrodes in aqueous solutions. Journal of Electroanalytical Chemistry, 2007, 600, 113-118.	3.8	40
33	The interface between Au(100) and 1-butyl-3-methyl-imidazolium-bis(trifluoromethylsulfonyl)imide. Journal of Electroanalytical Chemistry, 2015, 737, 218-225.	3.8	34
34	Electrochemical dissolution of aluminium in electrocoagulation experiments. Journal of Solid State Electrochemistry, 2016, 20, 3107-3114.	2.5	33
35	The double layer capacity of Pt(100) in aqueous perchlorate solutions. Electrochemistry Communications, 2002, 4, 787-789.	4.7	31
36	The metalâ€“ionic liquid interface as characterized by impedance spectroscopy and <i>in situ</i> scanning tunneling microscopy. Physical Chemistry Chemical Physics, 2018, 20, 21241-21250.	2.8	25

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37	Corrosion-protection properties of water-borne paint coatings as studied by electrochemical impedance spectroscopy and gravimetry. <i>Progress in Organic Coatings</i> , 2006, 56, 304-310.	3.9	24
38	Diffusion to fractal surfacesâ€”IV. The case of the rotating disc electrode of fractal surface. <i>Electrochimica Acta</i> , 1990, 35, 1423-1424.	5.2	22
39	Impedance of planar electrodes with scale-invariant capacitance distribution. <i>Journal of Electroanalytical Chemistry</i> , 1992, 332, 55-61.	3.8	20
40	Electron Transfer at the WO ₃ Electrolyte Interface under Controlled Mass Transfer Conditions. <i>Journal of the Electrochemical Society</i> , 1986, 133, 331-336.	2.9	19
41	The interface between HOPG and 1-butyl-3-methyl-imidazolium hexafluorophosphate. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 916-925.	2.8	19
42	Deposition of platinum monolayers on gold. <i>Journal of Solid State Electrochemistry</i> , 2011, 15, 2453-2459.	2.5	18
43	In situ electrochemical impedance spectroscopy of Zrâ€“1%Nb under VVER primary circuit conditions. <i>Journal of Nuclear Materials</i> , 2002, 300, 230-236.	2.7	15
44	The interfacial capacitance of Rh(111) in HCl solutions. <i>Electrochimica Acta</i> , 2009, 54, 3594-3599.	5.2	15
45	Comments on J. C. Wang's paper on the impedance of a fractal electrolyteâ€”electrode interface. <i>Electrochimica Acta</i> , 1988, 33, 713-715.	5.2	14
46	Method-independent representation of polarographic and voltammetric measurement results of reversible redox couples. <i>Journal of Electroanalytical Chemistry</i> , 1994, 364, 229-234.	3.8	14
47	Immersion measurements of potential of zero total charge (pztc) of Au(100) in an ionic liquid. <i>Electrochimica Acta</i> , 2016, 188, 512-515.	5.2	13
48	Dynamic electrochemical impedance spectroscopy of quasi-reversible redox systems. Properties of the Faradaic impedance, and relations to those of voltammograms. <i>Electrochimica Acta</i> , 2019, 308, 410-417.	5.2	13
49	Analysis of voltammograms of quasi-reversible redox systems: Transformation to potential program invariant form. <i>Electrochimica Acta</i> , 2019, 297, 1121-1129.	5.2	13
50	Water uptake of water-borne paint resin films as studied by impedance spectroscopy and gravimetry. <i>Progress in Organic Coatings</i> , 2007, 59, 95-99.	3.9	12
51	An impedance study of Ir(210) in HCl solutions. <i>Russian Journal of Electrochemistry</i> , 2009, 45, 29-37.	0.9	12
52	Analysis of quasi-reversible cyclic voltammograms: Transformation to scan-rate independent form. <i>Electrochemistry Communications</i> , 2018, 90, 69-72.	4.7	12
53	Connection of CVs and impedance spectra of reversible redox systems, as used for the validation of a dynamic electrochemical impedance spectrum measurement system. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 2883-2889.	2.5	12
54	Mechanism of Hole Injection on Ferric Oxide Photoelectrodes. <i>Journal of the Electrochemical Society</i> , 1983, 130, 632-635.	2.9	11

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55	Oxide layers of Zrâ€“1% Nb under PWR primary circuit conditions. <i>Journal of Nuclear Materials</i> , 2001, 297, 62-68.	2.7	11
56	Fast algorithm for differintegration. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1984, 179, 65-69.	0.1	8
57	MORPHOLOGY OF COBALT ELECTRODEPOSITS. <i>Fractals</i> , 1993, 01, 59-66.	3.7	7
58	Voltammetry and Impedance of Pt(111) Electrodes in Aqueous KClO ₄ Solutions. <i>Zeitschrift Fur Physikalische Chemie</i> , 2003, 217, 351-364.	2.8	7
59	Analysis of adsorption-related voltammograms: Transformation to potential-program invariant form. <i>Electrochemistry Communications</i> , 2020, 118, 106810.	4.7	7
60	Dynamic electrochemical impedance spectroscopy for the charge transfer rate measurement of the ferro/ferricyanide redox couple on gold. <i>Journal of Electroanalytical Chemistry</i> , 2021, 899, 115655.	3.8	7
61	Potential program invariant representation of voltammetric measurement results of reversible redox couples. <i>Journal of Electroanalytical Chemistry</i> , 1997, 422, 13-19.	3.8	6
62	Voltammetry coupled with impedance spectroscopy. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 2157-2159.	2.5	6
63	Response to the Commentary of Marcel Drâ¼schler and Bernhard Roling on â€“The interface between Au(111) and an ionic liquidâ€™. <i>Electrochimica Acta</i> , 2011, 56, 7246-7247.	5.2	5
64	Electrocoagulation: an electrochemical process for water clarification. <i>Journal of Electrochemical Science and Engineering</i> , 2015, .	3.5	5
65	Transformation to potentialâ€program invariant form of voltammograms and dynamic electrochemical impedance spectra of surface confined redox species. <i>Electrochemical Science Advances</i> , 0, , e2000039.	2.8	3
66	Discussion of â€œEquivalent Circuit Analysis of the Impedance Response of Semiconductor/Electrolyte/Counterelectrode Cellsâ€•[J. F. McCann and S. P. S. Badwal (pp. 551â€“559, Vol.) Tj ETQ 0 0 0 rg]T /Overlo		
67	Photoelectrochemical studies of gamma-irradiated iron oxides. <i>Radiation Physics and Chemistry</i> (1977), 1985, 26, 527-530.	0.3	2
68	Search for neutrons from cold nuclear fusion. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1990, 145, 327-337.	1.5	2
69	Atypical electric behavior of the double layer. Experimental case studies: Rh(111) in aqueous HCl solutions, and Au(111) in an ionic liquid, BMIPF ₆ . <i>Pure and Applied Chemistry</i> , 2010, 83, 259-268.	1.9	2
70	Impedance Spectra of Pt(100) in Aqueous H ₂ SO ₄ and HCl Solutions Around the Hydrogen Adsorption-Desorption Peak. <i>Zeitschrift Fur Physikalische Chemie</i> , 2012, 226, 935-943.	2.8	2
71	Potential Program Invariant Representation of Diffusionâ€“Adsorption Related Voltammograms. <i>Zeitschrift Fur Physikalische Chemie</i> , 2007, 221, 1137-1147.	2.8	1
72	Radiation-induced oxidation-reduction processes in the solid state studied by electrode impedance determination. <i>International Journal of Radiation Applications and Instrumentation Nuclear Tracks and Radiation Measurements</i> , 1988, 32, 429-431.	0.0	0

ARTICLE

IF CITATIONS

78 Electrochemistry at fractal interfaces. , 1992, , . 0